

## **Module I: Quiz**

- 1. Why solids form? Or even more categorically, why atoms interact?**
- 2. Why solids often form in periodic structures or lattices?**
- 3. Why there is a limited choice of types of lattices?**
- 4. What determine the total energy of the lattice?**
- 5. Why there are defects in real crystals?**
- 6. What sort of probes can we use to get information on the atom locations?**
- 7. What is the sense to use reciprocal space?**
- 8. Assume the magnitude of a k-wavevektor is low enough, so that k is far not reaching the edge of the 1<sup>st</sup> BZ; why such wave cannot be diffracted by this crystal?**
- 9. Why the concentration of vacancies in a solid may be affected both by temperature and pressure?**
- 10. What is the driving force for diffusion?**